



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D206-667-107BL
Job Sheet 166585



Part No: D206-667-107BL

Job Qty: 1 ea

Part Name: Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/12/17

Job Tracking No:

Due Date: 10/27/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Ship Via:

Bill of Materials



S034877



Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
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www.dartaerospace.com

PART NO: D206 - 667 - 107BL

Original Serial #: S034877

Revision:

Operation: Crosstubes

Change No: CHG003

Mfg Date: 01/24/18

Job No: 166585

D206-667-107BL / 166585 / S034877

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		10/26/17	0.00	0.00	Start Up Crosstubes		DPZ
100	DC	1 pcs		10/26/17	0.00	0.00	DC		
110	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging1		DPZ
120	CNC Bend Crosstubes	1 pcs		10/26/17	0.00	4.32	CNC Bend Crosstube		DAS DPZ/GP
130	QC	1 pcs		10/26/17	0.00	0.00	QC15		38 9-88
140	Crosstubes	1 pcs		10/26/17	0.00	2.87	Crosstube		
150	HandFXtube	1 pcs		10/26/17	0.00	0.74	HandFinish5		DAS
160	QC	1 pcs		10/26/17	0.00	0.00	QC7		38 DAS
170	QC	1 pcs		10/26/17	0.00	0.00	QC5		9-88 38 9-89
180	Outsource	1 pcs		10/26/17			SKY002-VC		med
190	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging2		med
200	QC	1 pcs		10/26/17	0.00	0.00	QC5		med
210	Outsource	1 pcs		10/26/17			ATE003-VC		6035556
215	Packaging	1 pcs		10/26/17	0.00	0.00	Packaging2		med 18/01/20
220	QC	1 pcs		10/26/17	0.00	0.00	QC14		PD 13.023
230	Crosstubes	1 pcs		10/27/17	0.00	2.87	Crosstube		✓ AS JAN 27 2018
240	QC	1 pcs		10/27/17	0.00	0.00	QC5		38
250	Packaging	1 pcs		10/27/17	0.00	0.00	Packaging1		FEB 01 2018
260	QC	1 pcs		10/27/17	0.00	0.00	QC4		med
270	Packaging	1 pcs		10/27/17	0.00	0.00	Packaging3		med
280	QC21-FG	1 Ea		10/27/17	0.00	0.00	QC21		MW FEB 01 2018

Part Op 100 - Photocopy bluefile and create labels as per PPP D206-667-107 chg 003

Descriptions: 120 - Bend tube as per Dwg D206-667-147 using CNC bender program

140 - ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 1- Drill holes & ream using drill Jig DT8541 & DT8542 as per Dwg D206-667-147. Drill all (3) top holes. Holes facing inboard. ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 2- Drill Fwd rivet holes using drill Jig DT8787 fwd as per Dwg D206-667-147. Note: Fwd side has 3x top holes. Facing inboard. 3- C'sink holes as per Dwg D206-667-147. Allow rivet to sit below surface to compensate for paint. 4- Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins. Drill ONLY 2 top holes ONLY plug most bottom holes to prevent accidental drilling. Drill holes and ream using drill Jig DT8541 & DT8542 as per Dwg D206-667-147. Drill only the top (2) holes. ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 5- Drill Aft rivet holes using drill Jig

150 - ***IMMEDIATELY AFTER GRINDING*** 1- PRESSURE WASH X-TUBE INSIDE AND OUT 2- ALODINE AND ACID ETCH X-TUBE INSIDE AND OUT AS PER QSI005.

180 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: 38854 LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order

190 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Ensure copy of NDT results attached to work order.

200 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***

210 - ISSUE PO ***** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** ***VERIFY BY ***** BATCH # TO MATCH W/O ***** **VERIFY BY ***** PART # TO MATCH W/O ***** **MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: ***** Finish Time: ***** PAINT: DELFLEET BLUE ***** Start Time: ***** Finish Time: ***** CLEAR DELFLEET B *****

220 - Wrap in plastic bag to protect from scratches ***VERIFY BY ***** BATCH # TO MATCH W/O ***** **VERIFY BY ***** PART # TO MATCH W/O *****

230 - 1-Abrade mating surfaces of support and crosstube with 400 grit sandpaper, clean the area with 4105S wash 'n' wipe 2-Install supports with Proseal 890 per DSI9565 and QSI 015 A/R Proseal 890 Batch: 138708 3- Torque bolts as per dwg 4-Install nut plates as per Dwg D206-667-147. Touch-up rivet heads with Imron paint. exp 5/18

240 - ***VERIFY BY ***** BATCH # TO MATCH W/O ***** **VERIFY BY ***** PART # TO MATCH W/O *****

260 - ***VERIFY BY ***** BATCH # TO MATCH W/O ***** **VERIFY BY ***** PART # TO MATCH W/O *****

270 - Identify and pack for shipping as per PPP D206-667-107 Location:FG035

DART
AEROSPACE
S034877

Fwd Crosstube — Mid Height 206L / L1 / L3 / L4, Blue

PART NO:
Original Serial #: D206 — 667 — 107BL
Revision:
Operation:
Change No: CHG003

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1270 Aberdeen Street
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CANADA
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Email: sales@dartaero.com
www.dartaerospace.com

Start up Operation 01/24/18
Job No: 166585

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation 5012897	D206-667-147TRN	1	15	0	0
	D2873-043 5001319 ① 5034892 ①	1	1	0	0
	D2873-045 5018818 ②	27	0	0	0
	D2891-1 5003359 ②	14	0	0	0
	D3595-063-395 FIG4400-0 ④	25	0	0	0
	MS20601-AD4W8 5019434 ④ 15→1 scrap	86	0	0	0
	MS21920-20 137820-159 ④	77	0	0	0
250-Packaging	AN5-30A	4	- 5019375	0	0
	AN5-32A	4	- FM138207-3	0	0
	AN5-7A	10	- FM123355	0	0
	AN970-4	12	- 5016395	0	0
	D206-667-017 5035784 ①	1	- 5035784	0	0
	MS21042L5	4	- 5016880	0	0
	NAS1149D0563J	18	- 5025743	0	0

Part Specifications

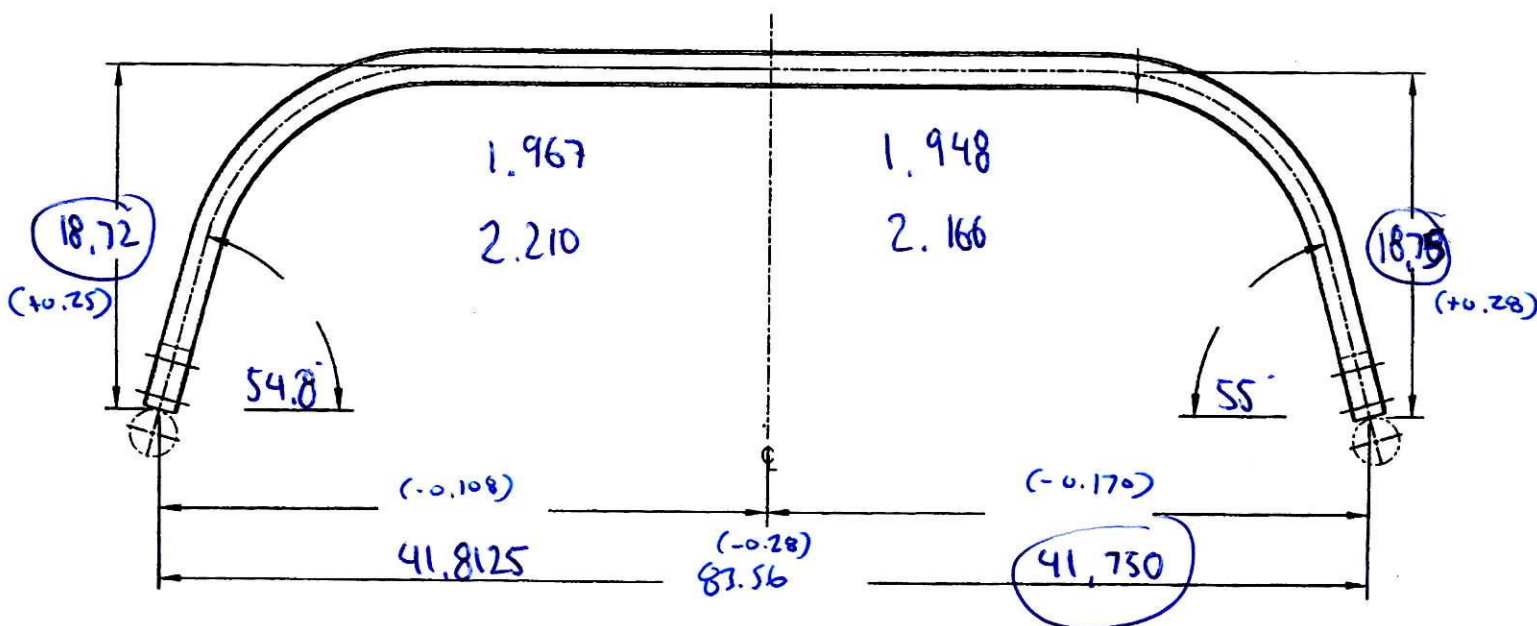
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1/17/18 7:47 AM dart.lacelle.linda

205

DART AEROSPACE LTD		Work Order: 166585
Description: Crosstube Mid Fwd (206L)		Part Number: D206-667-107
Inspection Dwg: D206-667-147	Rev: A	Page 1 of 1

Required Dimension	Min	Max
Height	18.34	18.60
1/2 Span	41.79	42.05
Angle	54°	56°
Total Span	83.59	84.09
Bending Passes	10	--
Crushing	--	6%



	Side A	Side B
Bending Passes	17	17
Crushing	5.8%	5.3%
Comments		

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	12.02.15	New Issue	KJ	
B	12.04.16	Added bending, crushing dimensions	KJ	

Item	Qty -147	Part Number	Description
1	X	D206-667-147	CROSSTUBE ASSEMBLY (206L MID FWD)
2	1	D6002-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2891-1	SUPPORT
6	4	D3595-063-395	RUBBER CUSHION
7	4	MS21920-20	CLAMP (OR MS21920-21)
8	14	MS20601AD4W8	RIVET (OR NAS9302B-4-8)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299- 947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6002-115
FINISHED LENGTH = 99.84±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-147" AND BATCH NUMBER ON
INSIDE OF CUFF PER DART QSI 044 6.4 (VIBRATING STYLUS).
- 7) WEIGHT: 15.0 lbs (-507 = 12.84)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY,
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 10 PASSES. MAXIMUM TUBE FLATTENING DUE
TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI
015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-20 CLAMPS (OR -21) WITH D3595-063-395 RUBBER CUSHIONS TO SECURE
THE D2891-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS
ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE
OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS
SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT
LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN
SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

A	NEW ISSUE	CP	10.11.23
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.12.23		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D206-667-147
SHEET 1 OF 4

TITLE CROSSTUBE ASS'Y (206L MID FWD)
SCALE NTS

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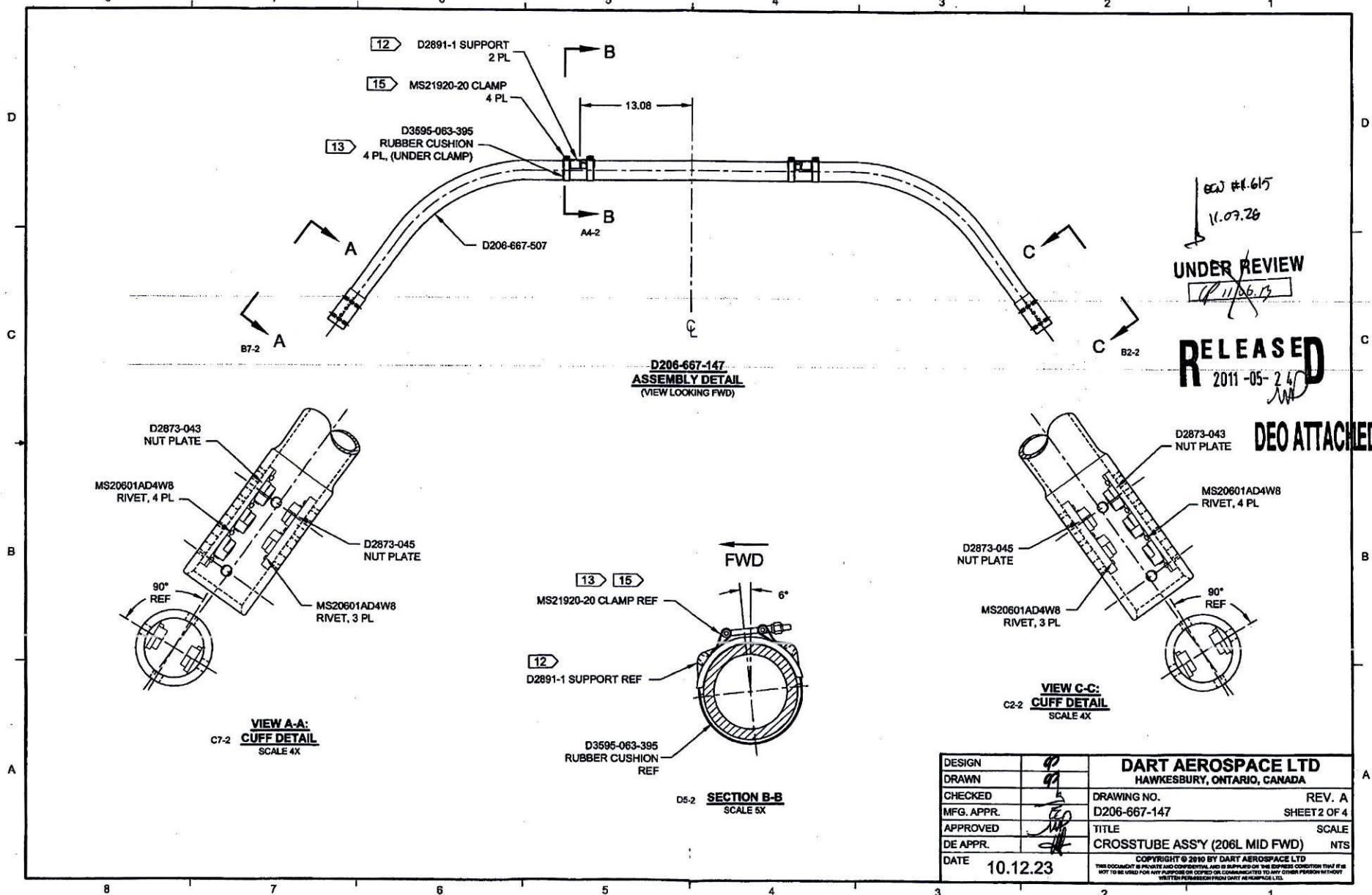
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ECO H11-665
11.07.28

UNDER REVIEW

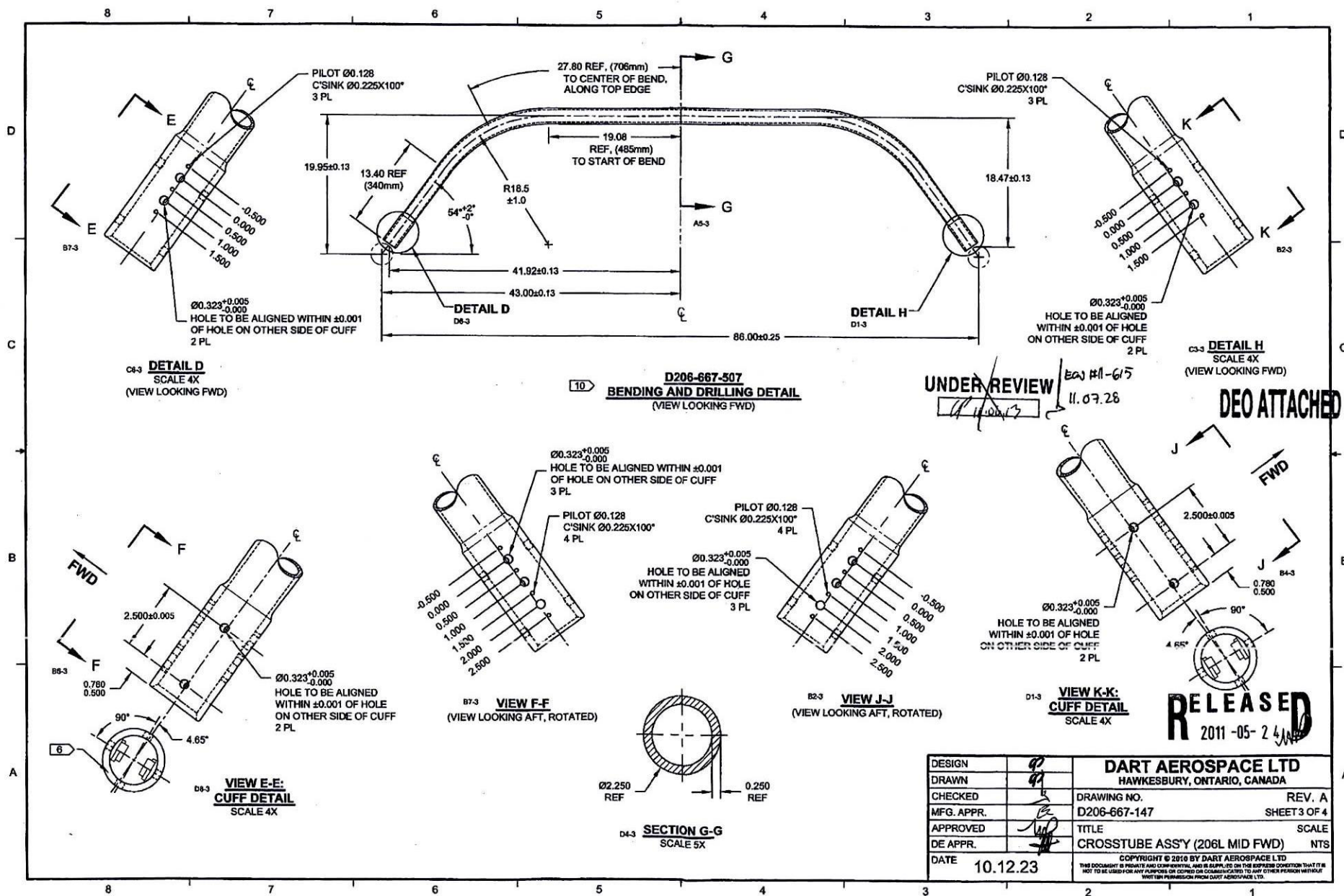
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2011-05-23
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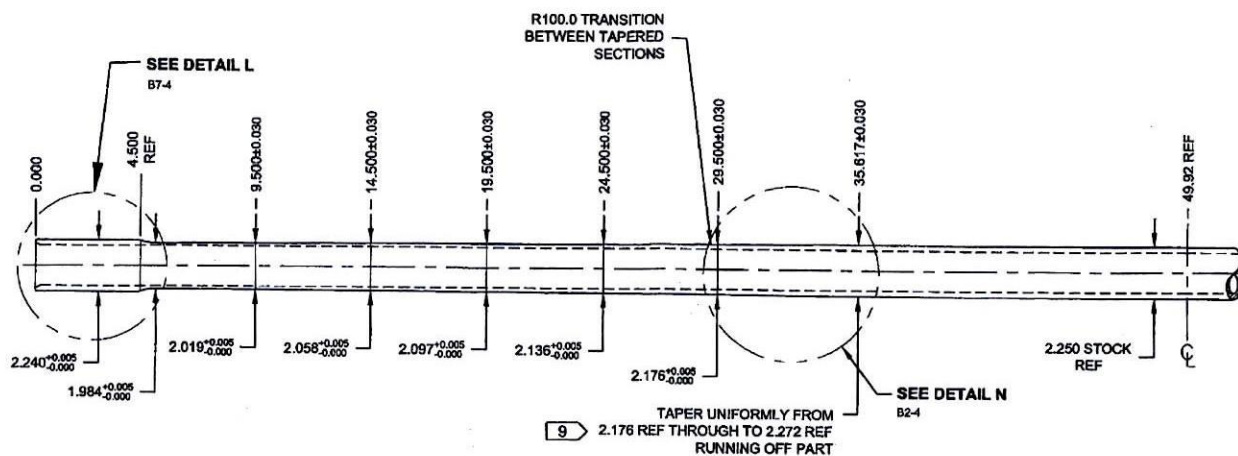


REV #1.615
11.07.28
UNDER REVIEW
RELEASED
2011-05-24
DEO ATTACHED

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D206-667-147	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE ASS'Y (206L MID FWD)	NTS
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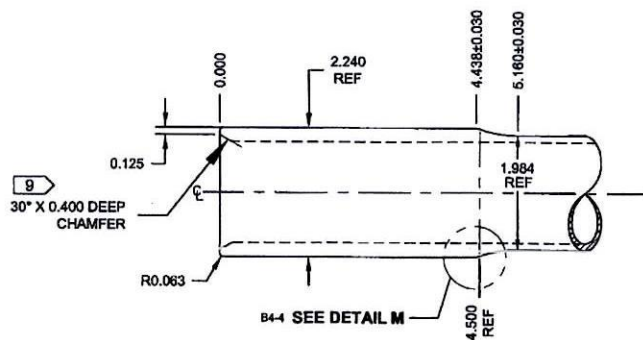
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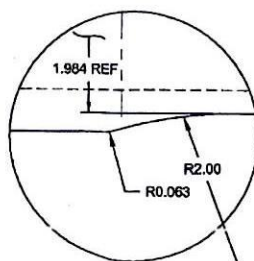
UNDER REVIEW

UP 11.06.13
SCN # 11-615
11.07.20

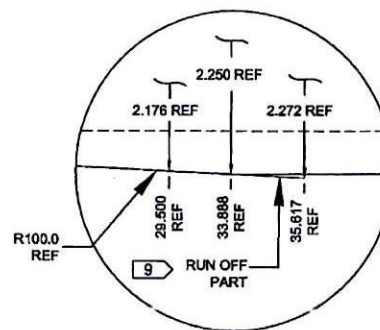
TURNING DETAIL



**DETAIL L:
CROSSTUBE CUFF**
NOT TO SCALE



**DETAIL M:
CUFF TRANSITION**
NOT TO SCALE



**DETAIL N:
TAPER RUN-OFF**
NOT TO SCALE

DEO ATTACHED

RELEASED
2011-05-23

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D206-667-147	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		CROSSTUBE ASS'Y (206L MID FWD)	NTS
DATE	10.12.23	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

DRAWING NO. D206-667-147	TITLE CROSSTUBE ASS'Y (206L MID FWD)	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D206-667-147-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>9</i>	CHECKED <i>ASS</i>	MFG. APPR. <i>JB</i>	APPROVED <i>MD</i>		DE APPR. <i>MD</i>		
DATE 11.07.15	DATE 11.07.20	DATE 11.07.21	DATE 11/07/21		DATE 11.07.21		

PURPOSE:

REPLACE MAGNOBOND WITH PROSEAL.

CHANGE:

IS:

Item	Qty -147	Part Number	Description
9	A/R	PROSEAL 890 B-2	SEALANT, AMS-S-8802 CLASS B-2

WAS:

9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)
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NOTE 12 & 15, SHEET 1 IS AMENDED AS FOLLOWS:

IS:

- 12) TO INSTALL D2891-1 SUPPORT: ABRASE MATING SURFACE OF SUPPORT AND CROSSTUBE WITH 180-GRIT SANDPAPER AND REMOVE RESIDUE WITH MEK (OR EQUIVALENT). APPLY A 0.04" TO 0.07" THICK LAYER OF PROSEAL 890 CLASS B-2 (OR AMS-S-8802 CLASS B-2) SEALANT TO MATING SURFACE OF SUPPORT.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. **PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER PROSEAL 890 SEALANT HAS CURED FOR 72 HOURS.**

WAS:

- 12) INSTALL D2891-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

RELEASED
2011-07-28

DRAWING NO. D206-667-147	TITLE CROSSTUBE ASS'Y (206L MID FWD)	REV. A	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D206-667-147-A-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED	MFG. APPR. <i>E</i>	APPROVED <i>AP</i>	DE APPR. <i>AP</i>		
DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	DATE 12.08.02	

PURPOSE:

ADD ELECTRICAL GROUNDING STRAP

CHANGE:

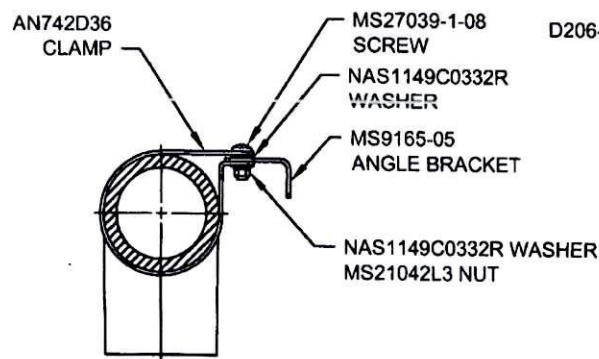
PARTS LIST:

ITEM	QTY -147	PART NUMBER	DESCRIPTION	
1	X	D206-667-147	CROSSTUBE ASSEMBLY (206L MID FWD)	
10	2	AN742D36	CLAMP	} ADD
11	2	MS9165-05	ANGLE BRACKET	
12	2	MS21042L3	NUT (OR MS21042-3)	
13	2	MS27039-1-08	SCREW	
14	4	NAS1149C0332R	WASHER (OR AN960C10L)	

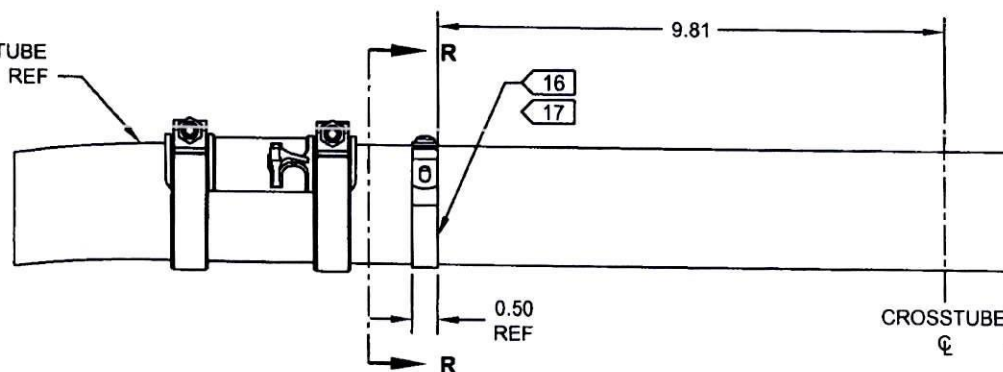
GENERAL NOTES:

- 16) MASK AREA UNDER CLAMP PRIOR TO PAINTING
17) SEAL EDGES WHERE AN742D36 CLAMP MEETS WITH THE CROSSTUBE USING SIKAFLEX-241/-291 OR MIL-S-8802 CLASS B2 OR PROSEAL 890 SEALANT
18) PERFORM RESISTANCE CHECK TO ENSURE MAX RESISTANCE IS 10 MILLIOHMS
- AFT
- } ADD

RELEASED
UP 12.08.17
ECN 12-431



SECTION R-R



DETAIL P
BONDING STRAP INSTALLATION 2 PL

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**QA Closed: 18/1/23 Date: FEB 12 2018Work Order update only ☐

Work Order: <u>166585</u> Part No. <u>0206-667107BC</u> NCR No. <u>18-6769</u>		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☒ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☒</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☒	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																	
Skid-tube ☐	Cross tube ☒	Water Jet ☐	Engineering ☐																																																																				
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Large Fab ☐	Composite ☐	Supplier ☐																																																																					
Date: <u>18/1/23</u>		Step #: <u>120</u>		QTY Effective: <u>1</u>		MRB (QSI042) Approval <u>DAS 12 9-89</u> <u>18/1/23</u>																																																																	
Description Work Order Deviation <u>Tube is bent high (+0.25/+0.28 over nominal) and narrow (-0.108/-0.170 below nominal).</u>				Disposition <u>Acceptable. Tube is even and within what has historically been manifested approved without issue</u>				Completed By <u>DAS 12 9-89</u> <u>18/1/23</u>																																																															
				Lead hand / Supervisor Approval Verification <u>PD 18-0212</u>																																																																			
				QC / QA Coordinator Approval <u>PD 18-0212</u>																																																																			
Root Cause <table style="width:100%;"> <tr><td>Environment ☐</td><td>No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☒</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>				Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☒	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%;"> <tr><td>☐ Pressure/Forced</td><td>☐ Temperature/Cure</td><td>☐ Power Loss/Surge</td><td>☐ Positioned Wrong</td></tr> <tr><td>☒ Bending</td><td>☐ Set-up</td><td>☐ Folio/Program</td><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Centre Not Concentric</td><td>☐ BOM/Route</td><td>☐ Grain</td><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Weld</td><td>☐ Part Incorrect</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Out of Sequence</td><td>☐ Part Moved</td></tr> <tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Off-set</td><td>☐ Drawing</td></tr> <tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Mislabeled</td><td>☐ Finish</td></tr> <tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Fit/Function</td><td>☐ Misread</td></tr> <tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Misaligned/off center</td><td>☐ Turning Sequence</td></tr> </table>				☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☒ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence
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OTHER : _____																																																																							



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO038854**

Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

PO No: PO038854
PO Date: 1/25/18
Due Date: 1/26/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	166582	D206-667-107BL	Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: _____ LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14
2		D206-667-107BL	Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: _____ LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order 166585	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14
3		D206-667-207BL	Aft Crosstube - Mid Height 206L / L1 / L3 / L4, Blue Outsource process - NDT per QSI038 4.1 *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: _____ LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order 170521	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14
4	170522	D206-667-207BL	Aft Crosstube - Mid Height 206L / L1 / L3 / L4, Blue Outsource process - NDT per QSI038 4.1 *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 038Or Issue P/O: _____ LPI as per ASTM 1417 Level 2 Attach copy of NDT results to work order	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14

Plex 1/26/18 10:44 AM dart.lavoie.chanta

PURCHASE ORDER

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	169676	D135-1027-153	Mid Height Fwd Crosstube ISSUE P/O: _____ C OF C IS REQUIRED	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14
6	169662	D135-1027-253	Mid Height Aft Crosstube ISSUE P/O: _____ C OF C IS REQUIRED	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$156.14285/pcs	\$156.14
Grand Total:										\$936.86
Order Notes										
Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A022 Apical Processing A024 process certifications A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality documents A048 counterfeit parts avoidance, detection, mitigation and disposition program A049 supplier awareness Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.										

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skyservice Work Order Traveler

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO34742	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO038854
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON:

- 1 FWD CROSSTUB , P/N# D135-1027-153 , J/S# 169676
- 1 AFT CROSSTUBE , P/N# D135-1027-253 , J/S# 169662
- 2 FWD CROSSTUBES , P/N# D206-667-107BL , J/S# 166582 **166585**
- 2 AFT CROSSTUBES , P/N# D206-667-207BL , J/S# 170521 , 170522
- 1 UPPER END , P/N# SWA6A-100
- 1 LOWER END , P/N# SWA6A-200
- 1 BEARING HOUSING , P/N# SWA6A-300
- 2 SEMI RINGS , P/N# SWA6A-500
- 1 COLLAR , P/N# SWA6A-600

Action Taken:	Date:	Initial/Stamp:				
LPI AND MPI C/O IAW ASTM E-1417M-13 & E-1444M-12 DE-MAGNETIZED AS PER ASTM E-144494-A NO CRACK FOUND PEN. ZL-56, MPO13600, CLEANER SKC-S MPO13923 , DEV. MPO11715 , UV LIGHT M-20142 PARKER PROBE S/N 18163 , CAL. DUE 17/FEB/2018, CARRIER, MPO17874	JAN 25 2018	 				
Description	Location	P/N	Qty	Batch	S/N Off	S/N On

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp	Date:
 Name: RAFIK MELIKIAN		JAN 25 2018



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038886

Supplier: ATE003-VC
Atelier Debosselage
358 Principale
Calumet
QC
J0V 1B0 Canada
Phone: 819 242 5633

PO No: PO038886
PO Date: 1/26/18
Due Date: 1/26/18
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Phone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	166582	D206-667-107BL	Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** **VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Finish Time: _____ Time: _____ PAINT: DELFLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DELFLEET B _____	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
2	166585	D206-667-107BL	Fwd Crosstube - Mid Height 206L / L1 / L3 / L4, Blue ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** **VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Finish Time: _____ Time: _____ PAINT: DELFLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DELFLEET B _____	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
3	170521	D206-667-207BL	Aft Crosstube - Mid Height 206L / L1 / L3 / L4, Blue ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00



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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038886

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
			CROSSTUBE*** **VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Fininsh Time: _____ PAINT:DEL FLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DEL FLEET B _____							
4	170522	D206-667-207BL	Aft Crosstube - Mid Height 206L / L1 / L3 / L4, Blue ISSUE PO _____ *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** **VERIFY BY _____ BATCH # TO MATCH W/O _____ ***VERIFY BY _____ PART # TO MATCH W/O _____ ***MASK SCRIBE B# & P# AND VERIFY*** 1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube as per QSI 005 4.2 PRIME: Start Time: _____ Fininsh Time: _____ PAINT:DEL FLEET BLUE _____ Start Time: _____ Finish Time: _____ CLEAR DEL FLEET B _____	Firmed	1/26/18	1 pcs	0 pcs	1 pcs	\$225.00/pcs	\$225.00
Grand Total:										\$900.00

18/01/26
mz

18/01/26
mz

Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Master Unit 000205

Tel (613) 632-5200

Containers on Master Unit 000205				
Serial No	Part No	Customer Part No	Status	Quantity
S037813	AN5-30A		Allocated	4
S037812	AN5-32A		Allocated	4
S037811	AN5-7A		Allocated	10
S037809	AN970-4	AN970-4	Allocated	12
S037808	D206-667-017	D206-667-017	Allocated	1
S024421	D2873-043		Allocated	0
S036648	D2873-043		Allocated	0
S036649	D2873-045		Allocated	0
S036650	D2891-1		Allocated	0
S036651	D3595-063-395		Allocated	0
S037807	MS21042L5	MS21042L5	Allocated	4
S036654	MS21920-20		Allocated	0
S037806	NAS1149D0563J	NAS1149D0563J	Allocated	18